MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2021/2022

BAC 3674 – ADVANCED MANAGEMENT ACCOUNTING

(All Sections / Groups)

8 AUGUST 2022
9.00 am. – 12.00 pm.
(3 Hours)

INSTRUCTION TO STUDENT

1. This Question paper consists of 6 pages (excluding cover page) with 4 Questions only.
2. Answer **ALL** Questions. The distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

QUESTION 1

You are the management accountant for Pulau Besar Sdn. Bhd. that produces and sells 750 units of Product A (deluxe model) and 7,000 units of Product B (standard model) each year.

Currently, costing in the production area is based on standard costing system using overhead absorbed on machine hours. Details of the two products for a typical period are:

	Hours per unit			
	Labour hours	**Machine hours**	**Materials Cost per unit RM**	**Production Units**
Product A	1	2	30	750
Product B	2	4	35	7,000

Direct labour costs is RM8 per hour. The overhead absorption rate for the period is RM30 per machine hours.

Pulau Besar Sdn. Bhd. marks its products up by 50%.

Sales of Product A have increased steadily since introduction, but company income has declined. Management at Pulau Besar Sdn. Bhd. is unhappy with the traditional costing system, and they have decided to try activity-based costing (ABC).

Management has identified the following four activities in the production of the two products. The production overheads are RM885,000 and further analysis shows that the total production overheads can be divided as follows:

	%
Costs relating to set-ups	35
Costs relating to machinery	20
Costs relating to material handling	15
Costs relating to inspection	30
Total production overhead	100

The following total activity volumes are associated with each product line for the period as a whole:

	Number of set up	Number of movements of materials	Number of inspections	Machine hours
Product A	100	20	150	1,500
Product B	500	100	850	28,000
Total	600	120	1000	29,500

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REQUIRED:

a) Calculate the cost per unit for each product using traditional methods, absorbing overheads base on machine hours. (2 marks)

b) Calculate the cost per unit for each product using ABC system (rounded to two decimal places) (9 marks)

c) Explain why costs per unit calculated under ABC are often very different to costs per unit calculated under traditional methods. Use the information from Pulau Besar Sdn. Bhd. to illustrate. (6 marks)

d) Discuss the implications of a switch to ABC system that might lead management to make different management decisions in terms of pricing and profitability of Product A and B. (4 marks)

e) What is Activity-based Management (ABM) and describe the four steps used in ABM to reduce costs. If activity-based management were implemented, which of the production overhead costs might be reduced or eliminated? Why? (4 marks)

[TOTAL 25 MARKS]

QUESTION 2

KL Mart (KL) is planning to open a convenient shop near a new housing development and office park. KL estimates that the current neighbourhood's retail market will be RM300,000 per year when the new housing and offices are occupied next year.

KL expects to capture 25% of the total neighbourhood market unless Speed Mart 888 also opens a new shop in the area. In that case, KL expects to gain only 10% of the market. KL's gross margin ratio is 30%. Its analysts believe there is a 40% chance that Speed Mart 888 will enter the market.

They have prepared the following estimates that they believe are valid for the first 4 years of the investment:

First year's market (year 1)	RM300,000
Annual market growth	10%
Market share without Speed Mart 888	25%
Market share with Speed Mart 888	10%
Gross margin ratio	30%
Opportunity (discount) rate	8%
Investment cost	RM40,000
Tax rate	35%
Depreciation (equivalent to capital allowance)	RM10,000 per year
Selling General & Administrative	RM4,000 per year
Probability of Speed Mart 888 entry	40%

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Discounting factor for present value of RM1 is as below:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
8%	0.926	0.857	0.794	0.735	0.681	0.630

All calculations are to be rounded to two decimal places.

Business losses (if any) generated can be utilised as a tax relief in the year itself.

REQUIRED:

a) Prepare the net present value analysis (with and without competitor) assuming that KL Mart can defer its investment decisions one year to resolve uncertainty about Speed Mar 888's intentions. (6 marks)

b) What does this analysis (as per (a)) indicate about the possible effects of Speed Mart's entry into the market? On the basis of this analysis, would you recommend that QL Mart defer its decision? (5 marks)

c) Prepare the net present value analysis (with and without competitor) assuming that KL Mart makes its investment decision now without resolving the uncertainty about Speed Mart 888's intentions. Also assume that KL Mart can terminate its investment after one year and sells its assets for RM30,000.

(8 marks)

d) What does this analysis (as per (c)) indicate about what KL Mart should do if Speed Mart 888 does enter the market in a year? On the basis of this analysis, would you recommend that KL Mart invest in the new shop now? Explain.

(6 marks)

[TOTAL 25 MARKS]

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QUESTION 3

Part A

Total Quality Management (TQM) is a quality culture.

REQUIRED:

a) Define TQM (2 mark)
b) Explain the types of quality costs (5 marks)
c) Define Balanced Scorecard (BSC) and its four perspectives (6 marks)

Part B

Business process re-engineering is another approach to managing costs and improving customer value that has become popular since the early 1990s.

REQUIRED:

What is business process re-engineering? Does it really lead to radical changes in business practices? Why is there an increase in business process re-engineering in twenty-first century? Discuss.

(12 marks)

[TOTAL 25 MARKS]

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QUESTION 4

SVV manufactures a variety of industrial valves and pipe fittings sold primarily to customers in Malaysia. Currently, the company is operating at 70 percent of capacity and is earning a satisfactory return on investment.

PP Bhd.(PP) has approached SVV's management with an offer to buy 120,000 pressure valves. PP manufactures an almost identical pressure valve, but a fire in PP's valve plant has closed its manufacturing operations. PP needs the 120,000 valves over the next four months to meet commitments to its regular customers; the company is prepared to pay RM190 each for the valves.

SVV' product cost for the pressure valve based on current attainable standards is:

	RM
Direct material	50
Direct labour	60
Manufacturing overhead	90
Total cost	200

Manufacturing overhead is applied to production at the rate of RM180 per standard direct labour hour. This overhead rate is made up of the following components:

	RM
Variable factory overhead	60
Fixed factory overhead - direct	80
Fixed factory overhead - allocated	40
Applied manufacturing overhead rate	180

Additional costs incurred in connection with sales of the pressure valve include 5 percent sales commissions and RM10 freight expense per unit. However, the company does not pay sales commissions on special orders that come directly to management.

In determining selling prices, Viva adds a 40 percent mark-up to product cost, which provides a RM280 suggested selling price for the pressure valve. The marketing department, however, has set the current selling price at RM270 to maintain market share.

Production management believes that it can handle PP Bhd's order without disrupting its scheduled production. The order would, however, require additional fixed factory overhead of RM120,000 per month in the form of supervision and clerical costs.

If management accepts the order, SVV will manufacture 30,000 pressure valves and ship them to PP Bhd. each month for the next four months.

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REQUIRED:

a) Determine how many additional direct labour hours would be required each month to fill the PP Bhd. order.

(3 marks)

b) Prepare an incremental analysis or differential analysis showing the impact of accepting the PP Bhd. order.

(10 marks)

c) Calculate the minimum unit price that SVV management could accept for the PP Bhd. order without reducing net income.

(4 marks)

d) Identify four factors, other than price, that SVV should consider before accepting the PP Bhd. order.

(8 marks)

[TOTAL: 25 MARKS]

End of Paper